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McGinnis

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(54) **AIRCRAFT STABILITY AND EFFICIENT CONTROL THROUGH INDUCED DRAG REDUCTION**

(71) Applicant: **John William McGinnis**, Kalispell, MT (US)

(72) Inventor: **John William McGinnis**, Kalispell, MT (US)

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(52) **U.S. Cl.**

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See application file for complete search history.

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Primary Examiner — Philip J Bonzell

(74) *Attorney, Agent, or Firm* — Cherskov Flaynik & Gurda, LLC

(57) **ABSTRACT**

An apparatus forming an aircraft which is designed for flight by movement through the air, the aircraft has a front and rear portions and a center of mass, with left and right sides when divided by a central plane of reference. The aircraft has inboard portions closer to said central plane of reference and outboard portions farther from said central plane of reference. Further, the aircraft contains at least one positive lifting aerodynamic surface configured to affect the flow of air near said at least one positive lifting aerodynamic surface when said aircraft is appropriately moving forward, and at least one elevon structure configured to create negative aerodynamic force when said aircraft is appropriately moving forward. The elevon structure is constructed so as to have outboard portions thereof positioned outward of said central plane of reference to a distance at least three-fourths of the distance from said central plane of reference to a tip end of said at least one wing.

6 Claims, 17 Drawing Sheets

